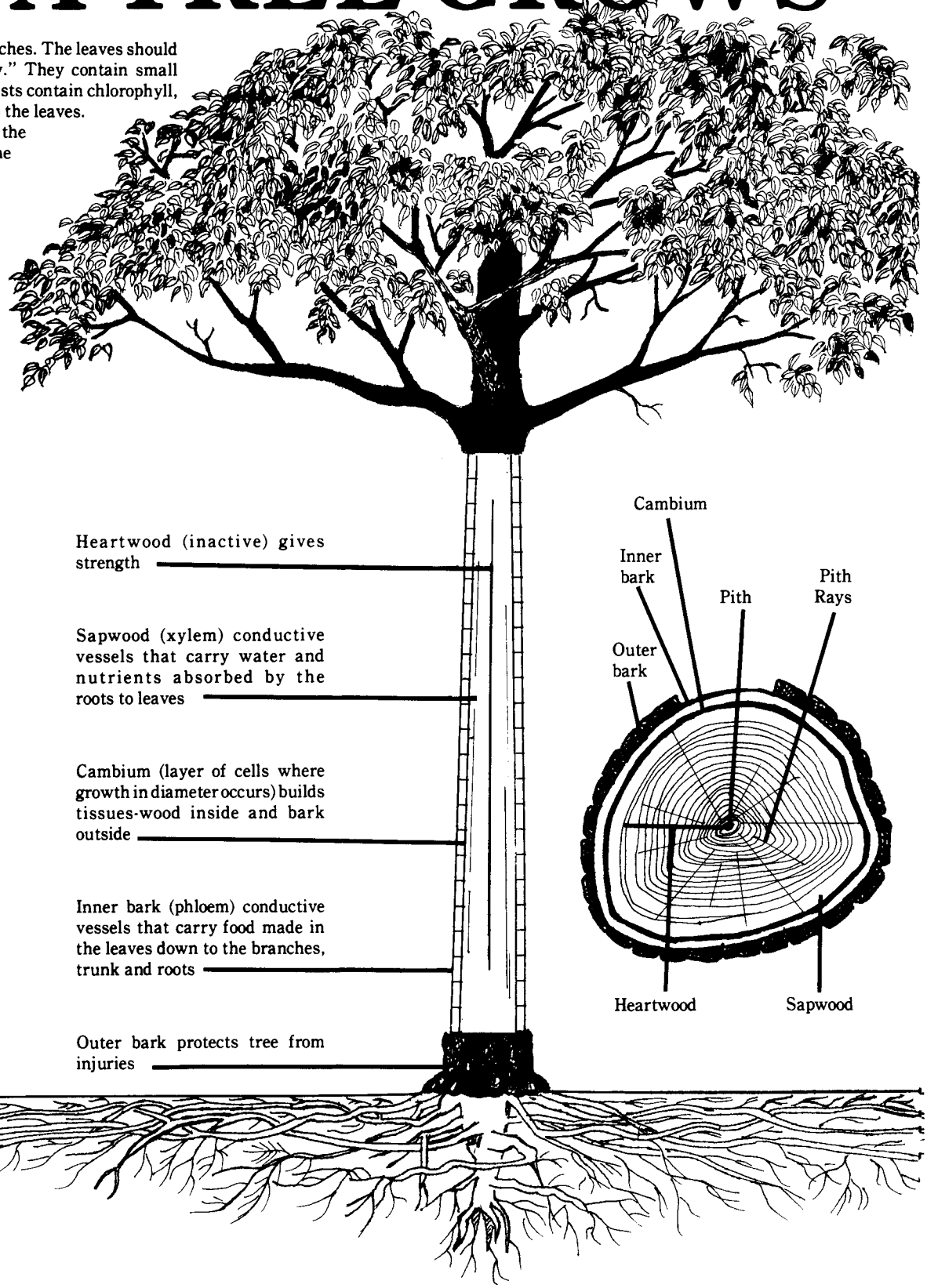
HOW A TREE GROWS

The crown consists of the leaves and branches. The leaves should be called the tree's "chemical laboratory." They contain small green bodies called chloroplasts. Chloroplasts contain chlorophyll, the substance that gives the green color to the leaves. In the presence of sunlight, the leaves use the water and nutrients from the roots, and the carbon dioxide from the air, to produce glucose and oxygen. The oxygen is released to the atmosphere and the glucose is stored in the trunk and roots. This process is called photosynthesis.



The trunk or main stem of the tree, supports the crown and contains the conductive vessels that run between the roots and the leaves. These vessels allow the movement of raw materials up to the leaves and the return of manufactured food to the wood and root systems for growth and storage.

The root system is the most important part of a tree, yet is the most frequently ignored. A tree's root system usually extends horizontally beyond the branch tips.

The majority of the root system is located in the upper 12" to 18" of soil because of the high levels of oxygen which the roots require. Roots absorb nutrients and water, store food, support and anchor the tree.

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